ABSTRACT OF THE DISCLOSURE

In a data transmission system , a content server 6 sends out content data designated by a content reservation request from a DTE 1 onto a first or a second communications circuit 4 or 5 for storage into a DCE 3 connected to the DTE 1. The content reservation request also indicates a time limit by when the designated content data is to be ready in the DCE 3. The content server 6 manages thus designated time limit. The content server 6 also carries out scheduling processing. During the processing, based on both the time limit under management and predetermined communications information, determined is a transmission timing which ensures the content data completely transmitted by the time limit, and which communications circuit 4 or 5 is optimal. These are determined on the basis of both the managed time limit and predetermined communications information. The content server 6 then sends out the content data onto thus determined optimal communications circuit 4 or 5 with the transmission timing determined through the scheduling processing. Accordingly, the data transmission system can achieve efficient use of a communications circuit in terms of transmission bandwidth, and data download from a server at less expense.